

Notice of Allowability

Application No.

09/808,760

Examiner

Harry Vartanian

Applicant(s)

AMRANY ET AL.

Art Unit

2634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 3/18/2005.
2. ☒ The allowed claim(s) is/are 1-3, 5-18, 20-31.
3. ☒ The drawings filed on 18 March 2005 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Daniel McClure (Reg# 38,962) on 04/22/2005.

The application has been amended as follows:

In specification on Pg. 3, Line 3 please change the following:

being NEXT (near-end crosstalk) and the other being FEXT (far-end crosstalk). NEXT results from a

In specification on Pg. 15, equation 2 please change variable "k" to variable "l":

$$p[n] = (f * u)[n] + ([k]l * e)[n] + w[n]$$

In specification on Pg. 22, equation 11 please change variable "k" to variable "l":

$$p[n] = \sum(f_j * u_j)[n] + ([k]l * e)[n] + w[n]$$

In specification on Pg. 22, equation 13 please change variable "k" to variable "l":

$$p[n] = (f_j \sim * u_j \sim)[n] + ([k]l * e)[n] + w[n]$$

In specification on Pg. 25, Line 19 please change the following:

Xtalk and the AWGN(Additive White Gaussian Noise).

In Claim 2, Line 2 please change the following:

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configured to cancel near-end(NEXT) crosstalk.

In Claim 3, Line 2 please change the following:

subscriber line (DSL) system and the modem is a DSL modem.

In Claim 5, Lines 4-5 please change the following:

by assuming that the far-end crosstalk(FEXT) term $(l \otimes e)[n]$ is less than one one-hundredth of the near-end crosstalk(NEXT) term $(f \otimes u)[n]$.

In Claim 20, Line 1 please change the following:

The method of claim ~~19~~18, wherein the processor is configured

In Claim 20, Lines 4-5 please change the following:

by assuming that the far-end crosstalk(FEXT) term $([[k]]l \otimes e)[n]$ is less than one one-hundredth of the near-end crosstalk(NEXT) term $(f \otimes u)[n]$.

In Claim 21, Lines 1 please change the following:

The method of claim ~~19~~18, wherein the step of solving the equation further

In Claim 21, Lines 2-4 please change the following:

includes the step of assuming that the far-end crosstalk(FEXT) $([[k]]l \otimes e)[n]$ term is not negligibly small compared to less than one one-hundredth of the near-end crosstalk(NEXT) $(f \otimes u)[n]$ term, and that source separation methods are utilized for computing the equations of Claim ~~19~~18.

In Claim 28, Line 6 please change the following:

computing a ~~d~~Discrete Fourier Transform of both the first signal and the common mode

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In Claim 28, Line 14 please change the following:

symbol t on path i , i.e. ~~Xtalk~~crosstalk and the Additive White Gaussian Noise(AWGN)

In Claim 30, Line 6 please change the following:

logic for computing a ~~d~~Discrete Fourier Transform of both the first signal and the common

In Claim 30, Line 15 please change the following:

symbol t on path i , i.e. ~~Xtalk~~crosstalk and the Additive White Gaussian Noise(AWGN)


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harry Vartanian whose telephone number is 571.272.3048. The examiner can normally be reached on 10:00-6:30 Mondays to Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 571.272.3056. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Harry Vartanian
Examiner
Art Unit 2634

HV



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